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Purpose: The U.S. Army Intelligence Center of Excellence publishes the **Military Intelligence Professional Bulletin** (**MIPB**) quarterly under the provisions of **AR 25-30**. **MIPB** presents information designed to keep intelligence professionals informed of current and emerging developments within the field and provides an open forum in which ideas; concepts; tactics, techniques, and procedures; historical perspectives; problems and solutions, etc., can be exchanged and discussed for purposes of professional development.

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Memetic Warfare: The Future of War

by First Lieutenant Brian J. Hancock

Introduction

The War on Terror pits the large conventional units of the U.S. against small, agile, and adaptable enemies around the world. The post modern world of warfare is characterized by a threat which can raise funds within the boundaries of the country it wishes to attack, train and acquire equipment within those same boundaries, and then ultimately execute its mission.

The response of the U.S. to this unprecedented challenge is embodied in the 2006 revision of FM 3-24 Counterinsurgency. This counterinsurgency (COIN) manual is a significant improvement over its predecessors. It recognizes how non-military aspects of the environment bear significantly on shaping insurgency and fueling terrorist movements. It devotes significant attention to recognizing these factors, and provides frameworks for analyzing and addressing them. Two such frameworks are ASCOPE (areas, structures, capabilities, organizations, people, and events) and PMESII-PT (political, military, economic, social, information, infrastructure, physical environment, time).

While the revision of FM 3-24 is a significant improvement over its predecessors, it does have shortcomings. As insurgent movements continue to evolve, the most successful operate in complex urban terrain, receive indirect support from criminal activities and external agencies which reduces their need for popular support, and have an ideological appeal grounded in religious fundamentalism. The new manual devotes only a single paragraph to this environmental change indicating that urban insurgencies are "difficult to counter" because they require little or no popular support.[1] Even more significantly, the doctrine of breaking up the rich tapestry of a society into bite size pieces is an attempt to apply a reductionist mindset to a complex adaptive system. The predicable end result is that the symptoms of the insurgency are treated in the hopes that the insurgency will go away, while the actual root causes–pathogenic *memes*, or viruses of the mind–are never addressed. This leaves open the possibility that in time, the insurgency will reconstitute itself, requiring the U.S. to intervene once more at the cost of additional lives and other resources.

This article will explore how an emerging subfield of psychology known as *memetics* can be used to identify and target the specific root causes of insurgency and other challenging social problems such as youth gang violence, the welfare cycle, or the deterioration of the public school system.[2] Finally a practical model for constructing and propagating benevolent memes in theatre, at the brigade level, will be presented.

Memetics Defined

The Oxford English Dictionary defines a meme as "an element of culture that may be considered to be passed on by non-genetic means, especially imitation." In his landmark book, *The Selfish Gene*, author Richard Dawkins coined the word meme to describe cultural replicators which spread through the social body akin to how genes spread through the biological body.[3] Memes form the invisible but very real DNA of human society. A meme is essentially an idea, but not every idea is a meme. In order for an idea to become a meme it must be passed on—or *replicated* to another individual. Much like a virus moves from body to body, memes move from mind to mind. Just as genes organize themselves into DNA, cells, and chromosomes, so too do replicating elements of culture organize themselves into memes, and co-adaptive meme complexes or *"memeplexes."* The study of these replicating elements of culture is known as memetics.

Sample memes include "Look both ways before you cross the street," "Just say no," the first four notes of Beethoven's 5th symphony, or "If you martyr yourself you will receive 72 virgins in the afterlife." As illustrated by the last example it is important to note that memes do not necessarily have to be true in order to be successful at replicating themselves. The memes an individual possesses forms the basis of his artifacts and behaviors. Some memes replicate more successfully as a related set, or memeplex, than as individual elements. Sample memeplexes include the scientific method, communism, and radical Islam.

Genes are measured along three principal axes, specifically fidelity, fecundity, and longevity.[4] Genes

replicate digitally through the process of mitosis. Discounting occasional mutation, translocation, etc., the copy fidelity of DNA is very high. Memes however, aside from transmission via digital media, are often passed on through the asynchronous process of conversation which has a much lower copy fidelity. Anyone who has ever played the game of telephone or Chinese whispers knows that the message given at the beginning of the chain is often very different than what the last person in the chain receives. Fecundity of DNA is only moderate, as the organism has to grow to sexual maturity and then pass its genes on through sexual reproduction. This process is relatively slow, taking an entire generation to occur. By comparison, memetic evolution is extremely fast.[5] In the span of a couple of minutes several memes can be transmitted from one person to another. Memetic evolution is exponentially faster than genetic evolution, so it should be no surprise that memes have surpassed genes as the dominant driver in human behavior.[6]

Finally genes are measured in terms of their longevity–defined by the life of the individual who carries them and their existence within the larger gene pool. As memes exist in the minds of human hosts they possess similar constraints on their preservation–both within the individual–and within the meme pool which is comprised of books, recordings, and other storage devices. Just as genes with higher fidelity, fecundity, and longevity can overwrite and replace lesser genes, the same is true of memes as well.

Viruses of the Mind

While most memes are beneficial, or at least relatively harmless, some memes such as the Nazi master race meme or the Pol Pot communist mutation are responsible for many human deaths. When individuals are so consumed by a meme/memeplex that the entire purpose of their existence becomes to spread the meme, they have become *memeoids*. These individuals are willing to throw away their own genetic reproductive potential by strapping on bombs or flying airliners into buildings in order to promote the memeplex that consumes them. Pathogenic memes which have potentially disastrous effects on their hosts and their neighbors are termed "viruses of the mind."[7]

With this frame of reference it is possible to see the actual root cause of terrorism and insurgency. Terrorists and insurgents do not suffer from declining per capita income or an unstable government–such are merely shaping operations which allow the true problem, a disease of the mind, to sweep through the weakened body politic. It has been postulated that prior to armed military conflict, xenophobic war memes must reach a certain critical mass within the host population in order to support aggressive action.[8] The cure for war then, and the key to preventing future wars, is to identify, track, isolate, and eliminate the specific memes which form the basis for the conflict. This is a task for which the intelligence community (IC) is uniquely qualified. The extinction of certain pathogenic memes would have an effect as profound as the eradication of smallpox.

Memetic Cults

Certain organizations, such as al-Qaeda, utilize modern brainwashing techniques in order to turn otherwise ordinary people into memeoids with which they can then inflict upon their memetic opposition. The human brain, despite its large capacity, can only hold a finite number of memes. This forms the basis of memetic selection. Additionally, some memes are diametrically opposed. Xenophobic memes which espouse rigid control over society, and most especially its female members, are being challenged on a daily basis by western liberalism. The clash of these opposed memes and memeplexes leads to reactionary memetic cults such as al-Qaeda.

Al-Qaeda isolates its potential new members in order to expose them to a single meme set many times a day for months, or years, without contact from other memes. Exclusive exposure to one meme (also known as brainwashing) induces a "dependent mental state" in some people.[9] They also employ tested and true techniques of bypassing the human action-attention-reward (AAR) complex which is a fundamental part of the human psyche. Status among primates is defined by attention integrated over time. When human beings receive lots of attention, it elevates their status, and causes their brains to release dopamine and endorphins giving them a "high." [10] Cults like al-Qaeda heap large amounts of attention on prospective martyrs in order to bypass the natural AAR pathway and release pleasure chemicals in the brain of the recipient. The recipient then misconstrues this positive feeling with the meme set of the organization causing them to internalize the beliefs of the cult as the source of their pleasure. Al-Qaeda employs many other modern brainwashing techniques to propagate their narrative (memeplex).

The discovery of John Walker Lindh (The American Taliban) brought to light one of the critical shortcomings of modern COIN practice. As the U.S. does not practice COIN at home, it can neither predict nor defend against home grown extremists. John Walker was rushed to justice, and as a result very little intelligence was gained from him and a valuable opportunity to understand the extremist movement was lost.[11] The application of memetics affords the understanding that John Walker was in fact suffering from a disease of the mind. Had he been de-programmed, and inoculated against the cult memeplex, it would have been possible to re-insert him as a double agent and begin taking the Taliban apart from within.

Curing Insurgency and Terrorism

The ultimate long term cure for terrorism and insurgent movements is to attack them at the atomic level through a process of memetic warfare. By identifying, cataloguing, and tracing the pathogenic memes that lead to these behaviors it will be possible to predict when and where they will occur. When the IC perceives that a certain dangerous meme set is reaching critical levels within a community, it can trigger operations to quarantine the area and send in an expert team of educators to execute an inoculative and preventative education program on the tactics of mind control and destructive cults.

Memetic Warfare

The principle of memetic warfare is to displace, or overwrite dangerous pathogenic memes with more benign memes. Once a critical level of saturation of the new meme set is achieved in the target population, undesirable human artifacts and behaviors such as weapon caches and IED attacks will disappear. Ideally the virus of the mind being targeted will be overwritten with a higher fidelity, fecundity, and longevity memeplex in order to assure long term sustainability. When this is not practical, it is still possible to displace a dangerous memeplex, by creating a more contagious benign meme utilizing certain packaging, replication, and propagation tricks.

The process of offensive memetic operations down range should be sanctioned via a memetic annex in the Theatre level operations order. This annex will clearly articulate the commander's intent for the end state of the process. For instance, in order to facilitate stability and support operations, the commander may direct memetic operations to support democracy. While democracy is not a perfect form of government, it is more stable and peaceful than other forms of government. With the objective established the next step is to break down the individual components of the memeplex of democracy that will have to be propagated within the target audience. The Organization of American States has sub-divided democracy into six essential elements:

- Freedom
- Human Rights
- Rule of Law
- Free Regular Elections
- Pluralistic Political System
- Separation of Powers

These components happen to be memeplexes in their own right, and if this was an actual operation, they would have to be further sub-divided into their respective memes. In the interest of simplicity (and brevity) this step will be overlooked. The process of memetic component definition is summarized in Figure 1.

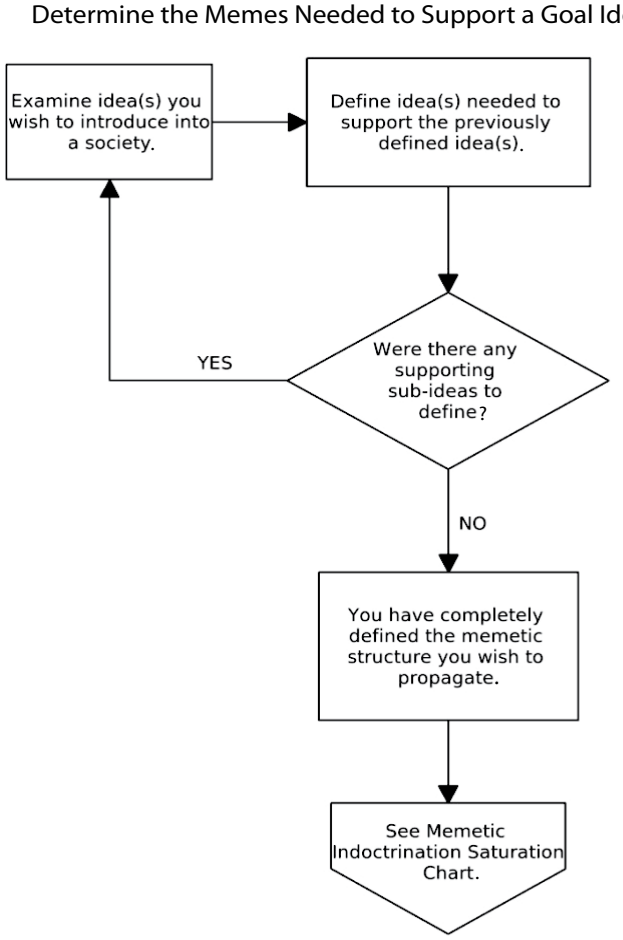
Determine the Memes Needed to Support a Goal Idea
Examine idea(s) you wish to introduce into a society.
Define idea(s) needed to support the previously defined idea(s).
Were there any supporting sub-ideas to define?
YES
NO
You have completely defined the memetic structure you wish to propagate.
See Memetic Indoctrination Saturation Chart.

Figure 1. Memetic Component Definition.

With the specific memetic components defined, the next step is to incorporate packaging and replication tricks in order to make the message more attractive–and hence more likely to be passed on. Successful memetic packaging involves incorporating key elements that resonate with the human psyche, often on a very primitive level, within the context of the message. A list of primal and secondary human buttons can be found in Table 1.[12]

Table 1 Memetic packaging–primary and secondary behavioral hot buttons.

Primary Buttons	Secondary Buttons
• Anger	• Belonging
• Fear	• Distinguishing Yourself
• Hunger	• Caring
• Lust	• Approval
	• Obeying Authority

For example, when Richard Brodie wrote his book on memetics, he did not title it "Introduction to Memetics." He instead opted for the title "Virus of the Mind" because he knew that would tie into the human primal button of fear. Humans will go to great lengths to learn about and avoid perceived threats, and this fueled the sales of his book. While the primal and secondary buttons have universal appeal, there are differentiated male and female buttons, especially with regards to sexuality.[13] Judicious use of the buttons enumerated in Table 2 enables gender specific targeting of the memetic message.

Table 2 Memetic packaging–male buttons, female buttons, and repetition tricks.

Male Buttons	Female Buttons	Repetition Tricks
• Power	• Security	• Altruism
• Dominance	• Commitment	• Gifting
• Window of Opportunity	• Investment	• The Truth
		• Catchy
		• Mnemonics
		• Trojan Horse

Table 2 also lists a number of replication tricks which can further enhance the appeal of the message. Altruistic messages, for instance, are well received. Additionally altruistic individuals tend to have more friends and are held in higher regard, making it more likely that others will imitate them and spread their memes.[14] Gifting is a powerful technique as human beings are psychologically hard-wired to reciprocate when given something. The Hari Krishna cult took advantage of this by giving people a free flower, and in exchange people reciprocated by accepting their memes. The Trojan Horse technique is an insidious trick that involves proffering a very attractive meme such as sex, and having a less attractive meme such as beer sales ride on its coat tails. The target individual is effectively seduced into accepting the entire memetic package as a whole, including the less desirable elements.

Finally, there are a number of propagation techniques that can expedite the saturation of the target message. *Repetition* breeds familiarity, and when combined with *multiple media formats* appeals to a wide range of personality types. *Key leaders* can quickly influence their followers to accept a message; and gaining their endorsement should be an integral part of any propagation plan. Finally placing someone in a state of *cognitive dissonance* can open a window of opportunity for changing that individual's meme set. High pressure salesmen make extensive use of this technique.

When the memetic packaging, replication, and propagation strategy is complete, the next step is to begin the process of indoctrination of the target population in order to achieve the target level of message saturation. The initial focus should be on community leaders with influence networks. Through incorporation of a feedback loop, propagation measures are refined and continued until the desired end state has been achieved. This process is mapped in Figure 2.

Memetic operations in the military environment require the use of broad spectrum assets, both organic and inorganic. The central hub, or brain of the operation, is the intelligence staff. The theatre level commander's intent is filtered down through the Division Analysis and Control Element (ACE) to the Brigade S2 which is in charge of memetic construction, propagation oversight, and feedback analysis. Command level support will be required to coordinate non-organic assets such as the Air Force Commando Solo psychological operations platform, Cyber Warfare (CW), and Public Affairs (PAO).

High level support will also be required to synchronize and deconflict other aspects of state power which form additional propagation platforms such as non-governmental organizations (NGOs) and private volunteer organizations (PVOs) as well as the Office of the Secretary of State. The assets required

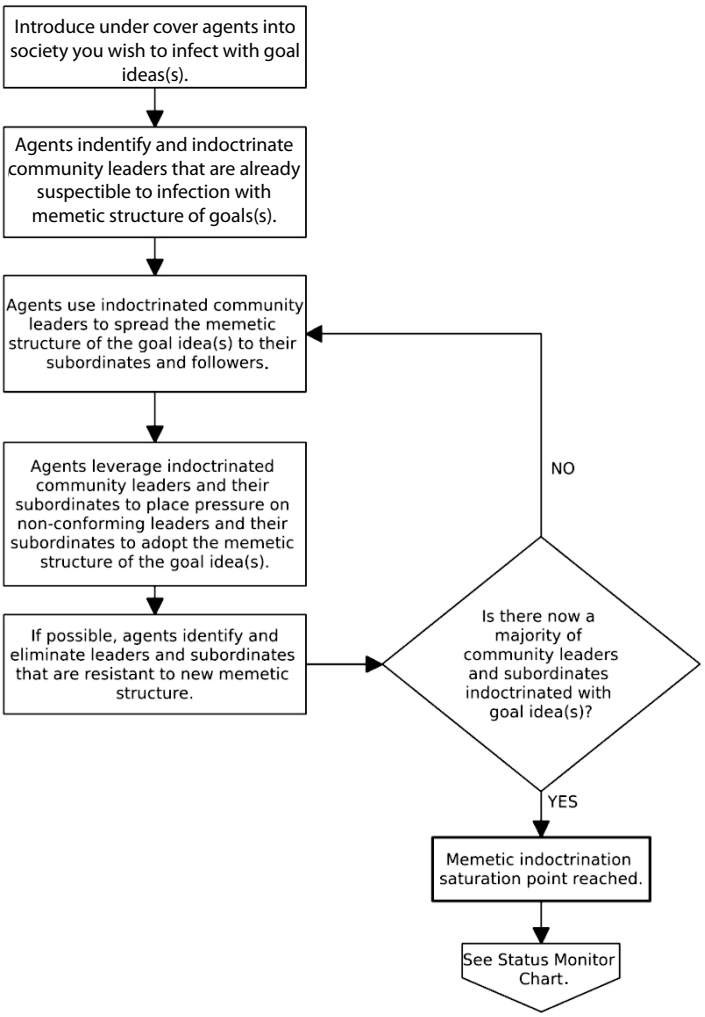
Introduce under cover agents into society you wish to infect with goal ideas(s).
Agents indentify and indoctrinate community leaders that are already suspectible to infection with memetic structure of goals(s).
Agents use indoctrinated community leaders to spread the memetic structure of the goal idea(s) to their subordinates and followers.
Agents leverage indoctrinated community leaders and their subordinates to place pressure on non-conforming leaders and their subordinates to adopt the memetic structure of the goal idea(s).
If possible, agents identify and eliminate leaders and subordinates that are resistant to new memetic structure.
Is there now a majority of community leaders and subordinates indoctrinated with goal idea(s)?
NO
YES
Memetic indoctrination saturation point reached.
See Status Monitor Chart.

Figure 2. Memetic Indoctrination and Saturation Assessment.

to conduct brigade level memetic projection are summarized in Figure 3.

The same assets which are utilized to propagate the approved memetic message will also serve as

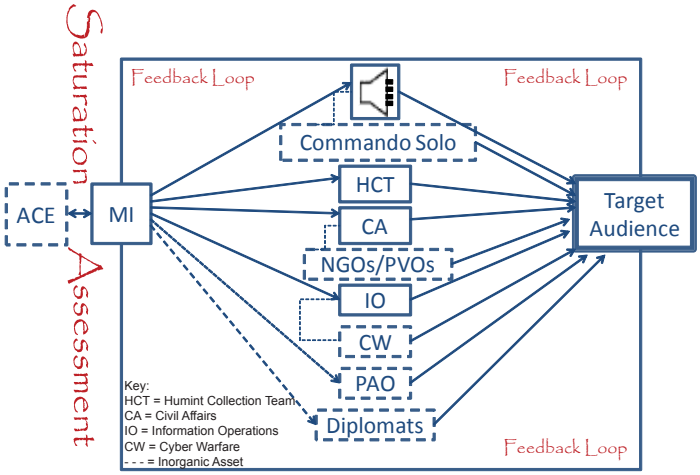

Figure 3. Brigade Level Memetic Propagation Model.

sensors within their specific areas of expertise to collect and channel feedback to the Military Intelligence (MI) control cell. The MI staff will make any necessary adjustments to the message to achieve the commander's intent, while mitigating second and third order effects, and then push the refined message through the appropriate propagation platforms once more.

Achieving the desired level of memetic saturation will result in the target population exhibiting the artifacts and behaviors that will support the ongoing coalition mission. It is important to note, that the memetic process does not end here. If a process of monitoring is not put in place to ensure that the memetic message maintains a critical mass, the target population may revert to previous undesirably artifacts and behaviors. For a relatively cheap ongoing investment, memetic monitoring can insure that unforeseen and/or emergent entities do not unravel the meme set and compromise future security. This critical process is detailed in Figure 4.

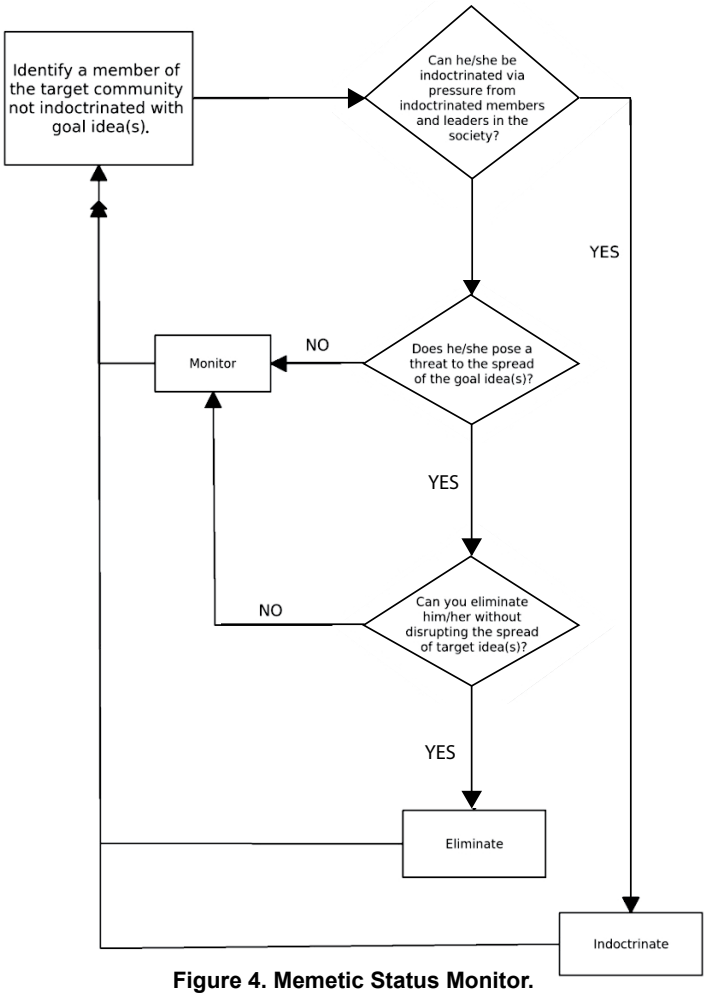
Identify a member of the target community not indoctrinated with goal idea(s).
Can he/she be indoctrinated via pressure from indoctrinated members and leaders in the society?
YES
Does he/she pose a threat to the spread of the goal idea(s)?
NO
Monitor
YES
Can you eliminate him/her without disrupting the spread of target idea(s)?
NO
YES
Eliminate
Indoctrinate

Figure 4. Memetic Status Monitor.

Conclusion–Implications of Memetics

Memetic theory provides a framework for dealing with the most troubling social and military problems at the root causal level. The relentless advance of technology will continue to make weapons of mass destruction (WMD) increasingly deadly, miniaturized, and available. Today memeoids are able to wreak considerable havoc by flying airliners into buildings or bombing key infrastructure. When these individuals are able to reliably obtain WMD, the survival of humanity will hinge on a preventative approach to terrorism and insurgency rather than a reactive response. Memetics provides the key to identifying, tracking, quarantining, and ultimately eradicating pathogenic memes before they result in deadly consequences. The IC is uniquely positioned to incorporate and exploit this new model to protect U.S. interests at home and abroad.

As society continues to become more competitive at every level, human beings are forced to evolve mentally and physically in order to be successful. These selection pressures will inevitably lead to genetic (and memetic) engineering. Future parents will do everything in their power to ensure that their progeny are able to successfully compete by supplying them with the best possible DNA and mental programming (memes). As high fidelity digital media technologies continue to proliferate, and with the expected debut of Artificial Intelligence capable of natural language recognition and common sense, the perfect tools to analyze, propagate, and engineer memes at the societal level will be within human reach.

While this raises profound moral implications, the reality is that this development is unavoidable. While the free thinking people of the U.S. may be loathe to utilize technologies which can be construed as mind control, its enemies have no such compunctions. It is vital to the interests of the U.S. and its people that memetic theory is fully explored, if for no other reason than to develop defenses against foreign memetic attack. Memetic operations do not require a presence in the target country. For a fraction of the cost of deploying troops on the ground, the enemies of the U.S. could conduct devastating memetic based information warfare against America. It is time for the IC to turn this threat into an opportunity. Memetics after all is only a tool, and tools when properly employed can be used to build peace, hope, prosperity, and a better way of life.

Endnotes

1. Frank G. Hoffman, "Neo-Classical Counterinsurgency?" *Parameters,* Summer 2007, 77.

2. Richard Brodie, *Virus of the Mind* (Seattle: Integral Press, 1996), Inside cover.

3. Susan Blackmore, *The Meme Machine* (New York: Oxford University Press, 1999), 6.

4. Ibid., 100.

5. Ibid., 59-62.

6. Ibid., 162.

7. Brodie, 57-64.

8. H. Keith Henson, "Evolutionary Psychology, Memes, and the Origin of War," *Kuro5hin*, 20 April 2006. 13.

9. H. Keith Henson, "Memetics and the Modular Mind," *Analog*. August 1987, 6.

10. H. Keith Henson, "Sex, Drugs, and Cults. An evolutionary psychology perspective on why and how cult memes get a drug-like hold on people, and what might be done to mitigate the effects," *The Human Nature Review*. Volume 2: August 23 2002, 343.

11. "John Walker and the fatal flaw in our war on terrorism!" *FACTNet Newsletter*, January 2002, 2-3.

12. Brodie, 90-93.

13. Brodie, 119-120.

14. Blackmore, 162-174.

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